

PENDING CLAIMS

109. A kit, comprising:
- a) a cleavage means; and
 - b) a first oligonucleotide comprising a duplex region adjacent to a single-stranded 3' arm.
110. The kit of Claim 109, wherein said first oligonucleotide comprises a fluorophore having quenched emission.
111. The kit of Claim 109, wherein said cleavage means comprises an enzyme.
112. The kit of Claim 111, wherein said enzyme comprises a DNA polymerase.
113. The kit of Claim 112 wherein said DNA polymerase comprises a thermostable DNA polymerase.
114. The kit of Claim 113, wherein said thermostable DNA polymerase is derived from an organism from genus *Thermus*.
115. The kit of Claim 111, wherein said enzyme comprises a 5' nuclease.
116. The kit of Claim 111, wherein said enzyme comprises a thermostable 5' nuclease derived from a thermostable DNA polymerase modified to have reduced synthetic activity.
117. The kit of Claim 109, wherein said first oligonucleotide is less than 100 nucleotides long.
118. The kit of Claim 109, wherein said first oligonucleotide is less than 50 nucleotides long.

119. The kit of Claim 109, further comprising a second oligonucleotide.

120. The kit of Claim 119, wherein said second oligonucleotide comprises a region complementary to said single-stranded 3' arm of said first oligonucleotide.

121. The kit of Claim 119, further comprising a first nucleic acid molecule containing a portion complementary to at least a portion of said second oligonucleotide.

122. The kit of Claim 121, further comprising a third oligonucleotide.

123. The kit of Claim 122, wherein said third oligonucleotide contains a portion complementary to at least a portion of said first nucleic acid molecule.